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EXAMINER

MILIA, MARK R

ART UNIT

PAPER NUMBER

2622

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/826,408

Applicant(s)

KURASHINA, HIROYASU

Examiner

Mark R. Milia

Art Unit

2622

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 November 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 and 41-43 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-37 and 41-43 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/14/05 has been entered. Currently, claims 1-37 and 41-43 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya in view of U.S. Patent No. 6056195 to Spain.

Regarding claim 1, Furuya discloses a tape printing apparatus comprising first tape cartridge-mounting means mounting first tape cartridge accommodating first tape (see paragraphs [0009], [0031]-[0033], and Drawings 1 and 2), desired configuration

information input means for inputting desired configuration information (see paragraphs [0034]-[0035]), and to-be-detected image-printing means for printing a to-be-detected image representative of said desired configuration information on said first tape such that said to-be-detected image can be detected by predetermined detection means, thereby enabling production of a detection label for being labeled on an arbitrary tape cartridge, with said to-be-detected image printed on said detection label (see paragraphs [0034]-[0035], [0043]-[0045], and [0047]-[0048], and Drawing 1, reference states that an adhesive label can be printed and applied to a tape cassette which carries printing information, specification information, ink information, or the like).

Furuya does not disclose expressly inputting desired configuration information which is other than information related to physical properties of the first tape cartridge.

Spain discloses inputting desired configuration information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66, reference shows that information input by a user is encoded in a barcode, which is part of a barcode label, such information can be text information that is in a desired typeface).

Regarding claim 7, Furuya discloses a tape cartridge labeled with a detection label printed with a to-be-detected image representative of desired configuration information for use in printing (see paragraphs [0034]-[0035], [0043], and [0047], and Drawing 1).

Furuya does not disclose expressly inputting desired configuration information which is other than information related to physical properties of the first tape cartridge.

Spain discloses inputting desired configuration information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66, reference shows that information input by a user is encoded in a barcode, which is part of a barcode label, such information can be text information that is in a desired typeface).

Regarding claim 11, Furuya discloses a tape printing apparatus comprising: tape cartridge-mounting means for mounting a tape cartridge labeled with a detection label formed by cutting off a first tape printed with a to-be-detected image representative of desired configuration information for use in printing (see paragraphs [0009], [0031]-[0035], [0043], and [0047], and Drawings 1 and 2), detection means detecting said to-be-detected image which is printed on said detection label labeled on said tape cartridge (see paragraph [0035] lines 12-15), and an image-printing means for printing an image on a second tape based on said desired configuration information represented by said to-be-detected image (see paragraphs [0035] lines 5-6, [0037]-[0038], reference teaches the printing of a character string corresponding to the specification information placed on the cartridge in the form of a barcode or the like).

Furuya does not disclose expressly inputting desired configuration information which is other than information related to physical properties of the first tape cartridge.

Spain discloses inputting desired configuration information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66, reference shows that information input by a user is encoded in a

barcode, which is part of a barcode label, such information can be text information that is in a desired typeface).

Furuya & Spain are combinable because they are from the same field of endeavor, encoding information into to be detected images, i.e. barcode.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoding of desired input information, such as text containing typeface information, as described by Spain, and which is well known and used in the art, with the system of Furuya.

The suggestion/motivation for doing so would have been to provide a means to transport a relatively large amount of information in a relatively small area, such as a barcode, through the use of encoding. Encoding of to be detected images, i.e. barcodes, is well known and used in the art to transport all kinds of information from one place to another. This information is usually utilized by a system to perform a particular task, as seen in the reference of Furuya.

Therefore, it would have been obvious to combine Spain with Furuya to obtain the invention as specified in claims 1, 7, and 11.

Regarding claim 2, Furuya and Spain disclose the apparatus discussed above in claim 1, and Furuya further discloses wherein said desired configuration information contains information of designation of at least one of a typeface, a decoration, and a color, for use in printing (see paragraph [0034] lines 5-12) and Spain further discloses wherein said desired configuration information contains information of designation of at

least one of a typeface, a decoration, and a color (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66).

Regarding claim 3, Furuya and Spain disclose the apparatus discussed above in claim 1, and Furuya further discloses wherein said to-be-detected image is an image of a pattern formed by patterning said desired configuration information in a predetermined format (see paragraph [0047] and Drawing 1).

Regarding claim 4, Furuya and Spain disclose the apparatus discussed above in claim 3, and Furuya further discloses wherein said pattern represents a code formed by encoding said desired configuration information (see paragraph [0034], [0035] lines 12-15, [0043] lines 4-10, and [0047], and Drawing 1).

Regarding claim 6, Furuya and Spain disclose the apparatus discussed above in claim 4, and Furuya further discloses wherein said pattern image is a unicolor pattern image that represents said code in a single color (see paragraph [0034] and Drawing 1).

Regarding claim 8, Furuya and Spain disclose the apparatus discussed above in claim 7, and Furuya further discloses wherein said detection label is formed by cutting off a first tape, the tape cartridge accommodating a second tape (see paragraphs [0035] lines 6-7 and 12-15, and [0047]).

Regarding claim 9, Furuya and Spain disclose the apparatus discussed above in claim 8, and Furuya further discloses wherein using a tape printing apparatus comprising first tape cartridge mounting means for mounting first tape cartridge accommodating said first tape (see paragraphs [0009], [0031]-[0033], and Drawings 1 and 2), desired configuration information input means for inputting said desired

configuration information (see paragraphs [0034]-[0035]), and to-be-detected image-printing means for printing said to-be-detected image representative of said desired configuration information on said first tape such that said to-be-detected image can be detected by predetermined detection means (see paragraphs [0034]-[0035], [0043]-[0045], and [0047]-[0048], and Drawing 1, reference states that an adhesive label can be printed and applied to a tape cassette which carries printing information, specification information, ink information, or the like).

Regarding claim 10, Furuya and Spain disclose the apparatus discussed above in claim 9, and Furuya further discloses a tape cartridge which accommodates said first tape as said second tape, and can be mounted in said tape printing apparatus as said first tape cartridge (see paragraph [0035] lines 12-15, reference states that each time a tape cartridge is input detection of specification information is executed).

Regarding claim 12, Furuya and Spain disclose the apparatus discussed above in claim 11, and Furuya further discloses including character string input means for inputting a character string having at least one character arranged therein (see paragraph [0035] lines 1-6), wherein said desired configuration information represented by said to-be-detected information includes information concerning printing of the input character string (see paragraph [0035]), and wherein said image printing means prints said print images based on the input character string according to said desired configuration information (see paragraph [0035], reference shows after character string has been input the tape cartridge undergoes detection of specification information that will ultimately decide the manner in which the character string will be printed).

Regarding claim 13, Furuya and Spain disclose the apparatus discussed above in claim 11, and Furuya further discloses wherein said print image is an image identical to said to-be-detected image (see paragraph [0047], reference shows that the image printed can be a barcode or the like and adhered to the tape cartridge which stores specification information used for printing).

4. Claims 14-19 and 21-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya in view of Spain and Zinsmeyer.

Regarding claim 14, Furuya discloses a label-producing method comprising the steps of: mounting a first tape cartridge accommodating a first tape in a first tape printing apparatus (see paragraphs [0009], [0031]-[0035], and Drawings 1 and 2), inputting desired configuration information to said tape printing apparatus (see paragraph [0035] lines 1-15 and [0043] lines 4-10), and printing a to-be-detected image representative said desired configuration information on said first tape by using said first tape printing apparatus such that said to-be-detected image can be detected by predetermined detection means (see paragraphs [0038] lines 5-8, [0034], [0043], [0047], and Drawing 1), producing a detection label by cutting off a portion including said to-be-detected image from said first tape (paragraphs [0035] lines 6-7, [0047], and Drawing 1).

Furuya does not disclose expressly inputting desired configuration information which is other than information related to physical properties of the first tape cartridge, labeling said detection label on a second tape cartridge accommodating printing

apparatus including said predetermined detection means; on said detection label labeled on said second tape cartridge, by said predetermined detection means of said second tape printing apparatus, printing a print image on said second tape dispensed from said second tape cartridge based on said desired configuration information represented by said and including said print image from said second tape (it is obvious that Furuya can print out a plurality of detection labels that can be attached to a plurality of tape cartridges, which can be mounted in a plurality of tape or label printers, and used to print labels).

Spain discloses inputting desired configuration information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66, reference shows that information input by a user is encoded in a barcode, which is part of a barcode label, such information can be text information that is in a desired typeface).

Zinsmeyer discloses a rotatable turret capable of holding a plurality of tape cassettes imprinted or affixed with barcodes identifying the ribbon type, color, and the like, switching the cassettes as needed to correctly print the desired image or character string, and a barcode reader for selecting the correct cassette to accurately print the desired image of character string (see column 17 line 36-column 18 line 16).

Furuya, Spain & Zinsmeyer are combinable because they are from the same field of endeavor, encoding information into to be detected images, i.e. barcode.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoding of desired input information, such as text

containing typeface information, as described by Spain, and which is well known and used in the art, and the plurality of tape cassettes aspect of Zinsmeyer with system of Furuya.

The suggestion/motivation for doing so would have been to provide a means to transport a relatively large amount of information in a relatively small area, such as a barcode, through the use of encoding. Encoding of to be detected images, i.e. barcodes, is well known and used in the art to transport all kinds of information from one place to another. This information is usually utilized by a system to perform a particular task, as seen in the reference of Furuya. Also, to provide multiple tape printing apparatuses and a plurality of tape cassettes that would be interchangeable to provide ease of use with less burden on the user and creating more compatibility between apparatuses which serve the same purpose of printing out labels based on specific configuration information.

Therefore, it would have been obvious to combine Zinsmeyer and Spain with Furuya to obtain the invention as specified in claim 14.

Regarding claim 15, Furuya, Spain, and Zinsmeyer do not disclose expressly wherein said first tape printing apparatus and said second tape printing apparatus are an identical tape printing apparatus.

However, at the time of the invention, it would have been obvious to a person of ordinary skill in the art that there would exist a plurality of identical tape printing apparatuses to provide interchangeable tapes and compatibility between apparatuses.

Therefore, although only one apparatus is described by Furuya and Zinsmeyer, it is known in the art that a multitude of identical apparatuses exist that execute the same functions as previously described.

Regarding claim 16, Furuya and Spain do not disclose expressly wherein said first tape cartridge and said second tape cartridge are an identical tape cartridge.

Zinsmeyer discloses a plurality of tape cartridges mounted to a turret which rotate and exchange position with a cartridge currently in use to correctly print the desired image or character string (see column 17 lines 36-60, reference shows that the cartridges are of an identical type varying only by color or the like which makes up the specification of the cartridge used to accurately print the desired image or character string therefore the reference is analogous to the claimed element).

Regarding claim 17, Furuya, Spain, and Zinsmeyer disclose the apparatus discussed above in claim 14, and Furuya further discloses wherein said desired configuration information contains information of designation of at least one of a typeface, a decoration, and a color, for use in printing (see paragraph [0034] lines 5-12) and Spain further discloses wherein said desired configuration information contains information of designation of at least one of a typeface, a decoration, and a color (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66).

Regarding claim 18, Furuya, Spain, and Zinsmeyer disclose the apparatus discussed above in claim 14, and Furuya further discloses wherein said to-be-detected image is an image of a pattern formed by patterning said desired configuration information in a predetermined format (see paragraph [0047] and Drawing 1).

Regarding claim 19, Furuya, Spain, and Zinsmeyer disclose the apparatus discussed above in claim 18, and Furuya further discloses wherein said pattern represents a code formed by encoding said desired configuration information (see paragraph [0034], [0035] lines 12-15, [0043] lines 4-10, and [0047], and Drawing 1).

Regarding claim 21, Furuya, Spain, and Zinsmeyer disclose the apparatus discussed above in claim 19, and Furuya further discloses wherein said pattern image is a unicolor pattern image that represents said code in a single color (see paragraph [0034] and Drawing 1).

Regarding claim 22, Furuya, Spain, and Zinsmeyer discloses the apparatus discussed above in claim 14, and Furuya further discloses including character string input means for inputting a character string having at least one character arranged therein (see paragraph [0035] lines 1-6), wherein said desired configuration information represented by said to-be-detected information includes information concerning printing of the input character string (see paragraph [0035], and wherein said image printing means prints said print images based on the input character string according to said desired configuration information (see paragraph [0035], reference shows after character string has been input the tape cartridge undergoes detection of specification information that will ultimately decide the manner in which the character string will be printed).

Regarding claim 23, Furuya, Spain, and Zinsmeyer discloses the apparatus discussed above in claim 14, and Zinsmeyer further discloses wherein said image is a second to-be-detected image which is an image identical to said to-be-detected image

(see column 17 line 36-column 18 line 16, reference shows that each tape cassette has an identical barcode that identifies the ribbon type, color, and the like which is read by a barcode reader to select the correct ribbon for printing which is analogous to the claimed element as both hold specific configuration information relating to the tape cassette).

Regarding claim 24, Furuya discloses a label producing method that allows a user to print a label containing specification information relating to the attributes of a tape cassette and affix the label to the cassette in the form of a barcode or the like. Furuya also discloses the tape writing apparatus detects the specification information of the tape cassette when the cassette is placed into the apparatus, the tape writing apparatus capable of detecting a plurality of different cassettes (see paragraphs [0009], [0031]-[0038], [0043]-[0048], and Drawings 1 and 2).

Furuya and Spain do not disclose expressly a label-producing method further comprising the steps of: labeling a second detection label to a third tape cartridge accommodating a third tape, said second detection label being a print image label produced by cutting off a portion including said second to-be-detected image which is printed on said second tape by said second tape printing apparatus, from said second tape, mounting said third tape cartridge in a third tape printing apparatus including said predetermined detection means, detecting said second to-be-detected image which is printed on said second detection label labeled on said third tape cartridge, by using said predetermined detection means of said third tape printing apparatus, printing a second print image which is different from said second to-be-detected image, on said third tape

dispensed from said third tape cartridge, based on said desired configuration information represented by said second to-be-detected image, and producing a second print image label by cutting off a portion including said second print image from said third tape.

Zinsmeyer discloses a method of reading a plurality of different tape cassettes all with barcodes affixed to or imprinted on identifying a ribbon type, color, or the like to correctly print an image or character string (see column 17 line 36-column 18 line 16).

Zinsmeyer does not disclose expressly a label-producing method further comprising the steps of: labeling a second detection label to a third tape cartridge accommodating a third tape, said second detection label being a print image label produced by cutting off a portion including said second to-be-detected image which is printed on said second tape by said second tape printing apparatus, from said second tape, mounting said third tape cartridge in a third tape printing apparatus including said predetermined detection means, detecting said second to-be-detected image which is printed on said second detection label labeled on said third tape cartridge, by using said predetermined detection means of said third tape printing apparatus, printing a second print image which is different from said second to-be-detected image, on said third tape dispensed from said third tape cartridge, based on said desired configuration information represented by said second to-be-detected image, and producing a second print image label by cutting off a portion including said second print image from said third tape.

However, at the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine Zinsmeyer with Furuya to allow for a plurality of label producing apparatuses and a plurality of tape cartridges that contain different detection labels that refer to the specific configuration information for each tape. Having a plurality of tape cartridges and apparatuses allows for greater compatibility by using parts that are interchangeable, which is well known in the art, and the printing of more complex images or character strings can be carried out by replacing the tape cartridges, each with a unique configuration, to aid in the desired output.

Regarding claim 25, Furuya, Spain, and Zinsmeyer discloses the apparatus discussed above in claim 24, and Furuya further discloses including character string input means for inputting a character string having at least one character arranged therein (see paragraph [0035] lines 1-6), wherein said desired configuration information represented by said to-be-detected information includes information concerning printing of the input character string (see paragraph [0035]), and wherein said image printing means prints said print images based on the input character string according to said desired configuration information (see paragraph [0035], reference shows after character string has been input the tape cartridge undergoes detection of specification information that will ultimately decide the manner in which the character string will be printed).

Regarding claim 26, Furuya, Spain, and Zinsmeyer do not disclose expressly wherein said second tape printing apparatus and said third tape printing apparatus are an identical printing apparatus.

However, at the time of the invention, it would have been obvious to a person of ordinary skill in the art that there would exist a plurality of identical tape printing apparatuses to provide interchangeable tapes and compatibility between apparatuses.

Therefore, although only one apparatus is described by Furuya and Zinsmeyer, it is known in the art that a multitude of identical apparatuses exist that execute the same functions as previously described.

5. Claims 27-31 and 33-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya in view of Spain and Mochinaga.

Regarding claim 27, Furuya discloses a tape cartridge bearing a to-be-detected image in a manner such that said to-be-detected image can be detected by a predetermined detection means (see paragraph [0034] and [0035] lines 11-15).

Furuya does not disclose expressly character string information which is other than information related to physical properties of the first tape cartridge and wherein said to-be-detected image is a character string information image that represents character string information for printing an image of a fixed-form character string having at least one character arranged therein.

Spain discloses character string information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66).

Mochinaga discloses wherein said to-be-detected image is a character string information image that represents character string information for printing an image of a

fixed-form character string having at least one character arranged therein (see paragraphs [0024]-[0025], [0038]-[0040], and [0045] and abstract, reference teaches a character string information part of a tape cassette indicating properties of the tape and an additional character string that is to be printed out that is stored in memory).

Furuya, Spain, & Mochinaga are combinable because they are from the same field of endeavor, printing labels based on encoded information.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoding of desired input information, such as text containing typeface information, as described by Spain, and which is well known and used in the art, and the character string storage and processing of Mochinaga with the system of Furuya.

The suggestion/motivation for doing so would have been to provide a means to transport a relatively large amount of information in a relatively small area, such as a barcode, through the use of encoding. Encoding of to be detected images, i.e. barcodes, is well known and used in the art to transport all kinds of information from one place to another. This information is usually utilized by a system to perform a particular task, as seen in the reference of Furuya. Also, to provide both ribbon properties and character string properties of a tape cassette to allow more accurate printing of a desired job with less required user intervention (see paragraphs [0001]-[0009] of Mochinaga).

Therefore, it would have been obvious to combine Mochinaga and Spain with Furuya to obtain the invention as specified in claim 27.

Regarding claim 28, Furuya, Spain, and Mochinaga disclose the system above in claim 27, and Mochinaga further discloses wherein said to-be-detected image is said image of said fixed-form character string (see paragraphs [0036]-[0038]).

Regarding claim 29, Furuya, Spain, and Mochinaga disclose the system above in claim 27, and Mochinaga further discloses wherein said to-be-detected image is a designation image representative of designation of selection of one of registered fixed-form character string images (see paragraphs [0036]-[0040]).

Regarding claim 30, Furuya, Spain, and Mochinaga disclose the system above in claim 29, and Furuya further discloses wherein said to-be-detected image is an image of a pattern formed by patterning said desired configuration information in a predetermined format (see paragraph [0047] and Drawing 1).

Regarding claim 31, Furuya, Spain, and Mochinaga disclose the system above in claim 30, and Furuya further discloses wherein said pattern represents a code formed by encoding said desired configuration information (see paragraph [0034], [0035] lines 12-15, [0043] lines 4-10, and [0047], and Drawing 1).

Regarding claim 33, Furuya, Spain, and Mochinaga disclose the system above in claim 31, and Furuya further discloses wherein said pattern image is a unicolor pattern image that represents said code in a single color (see paragraph [0034] and Drawing 1).

Regarding claim 34, Furuya, Spain, and Mochinaga disclose the system above in claim 31, and Furuya further discloses wherein said to-be-detected image is printed or

formed on a surface of a member attached to a cartridge casing (see paragraphs [0047]-[0048] and Drawing 1).

Regarding claim 35, Furuya, Spain, and Mochinaga disclose the system above in claim 31, and Furuya further discloses wherein said member attached to said cartridge casing label affixed to surface of said cartridge casing (see paragraphs [0047]-[0048] and Drawing 1).

Regarding claim 36, Furuya, Spain, and Mochinaga disclose the system above in claim 31, and Furuya further discloses wherein said member attached to said cartridge casing plate attached to a surface said cartridge casing (see paragraphs [0047]-[0048] and Drawing 1).

Regarding claim 37, Furuya, Spain, and Mochinaga disclose the system above in claim 31, and Furuya further discloses wherein said to-be-detected image is an image printed or formed on surface of said cartridge casing (see paragraphs [0047]-[0048] and Drawing 1).

6. Claims 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Zinsmeyer in view of Spain and Mochinaga.

Regarding claim 41, Zinsmeyer discloses a tape printing method comprising the steps of mounting a tape cartridge (see column 6 line 65-column 7 line 37 and column 17 line 36-column 18 line 16) and detecting a to-be-detected image that said tape cartridge bears (see column 17 line 36-column 18 line 16).

Zinsmeyer does not disclose expressly character string information which is other than information related to physical properties of the first tape cartridge and printing a fixed-form character string image based character string information represented by said to-be-detected image.

Spain discloses character string information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66).

Mochinaga discloses printing a fixed-form character string image based character string information represented by said to-be-detected image (see paragraphs [0024]-[0025], [0038]-[0040], and [0045] and abstract, reference teaches a character string information part of a tape cassette indicating properties of the tape and an additional character string that is to be printed out that is stored in memory).

Zinsmeyer, Spain, & Mochinaga are combinable because they are from the same field of endeavor, printing labels based on encoded information.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoding of character string information, such as text containing typeface information, as described by Spain, and which is well known and used in the art, and the character string storage and processing of Mochinaga with the system of Zinsmeyer.

The suggestion/motivation for doing so would have been to provide a means to transport a relatively large amount of information in a relatively small area, such as a barcode, through the use of encoding. Encoding of to be detected images, i.e.

barcodes, is well known and used in the art to transport all kinds of information from one place to another. This information is usually utilized by a system to perform a particular task. Also, to provide a system that would allow a plurality of tape cassettes to be stored and ready for deployment that contain both different colors and types as well as different preset character strings for faster printing and less required user intervention.

Therefore, it would have been obvious to combine Mochinaga and Spain with Zinsmeyer to obtain the invention as specified in claim 41.

Regarding claim 42, Zinsmeyer, Spain, and Mochinaga disclose the system above in claim 41, and Zinsmeyer further discloses a tape printing method further including the step of taking up a tape (see column 18 lines 3-7).

Regarding claim 43, Zinsmeyer discloses a label-producing method comprising the steps mounting a tape cartridge (see column 6 line 65-column 7 line 37 and column 17 line 36-column 18 line 16), detecting a to-be-detected image that said tape cartridge bears (see column 17 line 36-column 18 line 16), and taking up a tape (see column 18 lines 3-7).

Zinsmeyer does not disclose expressly character string information which is other than information related to physical properties of the first tape cartridge and printing a fixed-form character string image based on character string information represented by said to-be-detected image and cutting a portion printed said fixed-form character string image from said tape.

Spain discloses character string information which is other than information related to physical properties (see Figs. 2B and 3, and column 4 lines 13-17, 23-26, and 64-66).

Mochinaga discloses printing a fixed-form character string image based on character string information represented by said to-be-detected image (see paragraphs [0024]-[0025], [0038]-[0040], and [0045] and abstract, reference teaches a character string information part of a tape cassette indicating properties of the tape and an additional character string that is to be printed out that is stored in memory) and cutting a portion printed said fixed-form character string image from said tape (see paragraph [0018]).

Zinsmeyer, Spain, & Mochinaga are combinable because they are from the same field of endeavor, printing labels based on encoded information.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the encoding of character string information, such as text containing typeface information, as described by Spain, and which is well known and used in the art, and the character string storage and processing of Mochinaga with the system of Zinsmeyer.

The suggestion/motivation for doing so would have been to provide a means to transport a relatively large amount of information in a relatively small area, such as a barcode, through the use of encoding. Encoding of to be detected images, i.e. barcodes, is well known and used in the art to transport all kinds of information from one place to another. This information is usually utilized by a system to perform a particular

task. Also, to provide a system that would allow a plurality of tape cassettes to be stored and ready for deployment that contain both different colors and types as well as different preset character strings for faster printing and less required user intervention.

Therefore, it would have been obvious to combine Mochinaga and Spain with Zinsmeyer to obtain the invention as specified in claim 43.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya and Spain as applied to claim 4 above, and further in view of Bahrabadi.

Furuya and Spain do not disclose expressly wherein said code is a binary code.

Bahrabadi discloses wherein said code is a binary code (see column 8 lines 26-47).

Furuya, Spain, & Bahrabadi are combinable because they are from the same field of endeavor, printing using specific configuration information provided in a to be detected image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the binary code of Bahrabadi with the system of Furuya and Spain.

The suggestion/motivation for doing so would have been to provide an increased number of possible configurations that can be stored on a particular cassette and by which only one binary switch would need to be changed to affect the print parameters.

Therefore, it would have been obvious to combine Bahrabadi with Furuya and Spain to obtain the invention as specified in claim 5.

8. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya, Spain, and Zinsmeyer as applied to claim 19 above, and further in view of Bahrabadi.

Furuya, Spain, and Zinsmeyer do not disclose expressly wherein said code is a binary code.

Bahrabadi discloses wherein said code is a binary code.

Furuya, Spain, Zinsmeyer, & Bahrabadi are combinable because they are from the same field of endeavor, printing using specific configuration information provided in a to be detected image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the binary code of Bahrabadi with the system of Furuya, Spain, and Zinsmeyer.

The suggestion/motivation for doing so would have been to provide an increased number of possible configurations that can be stored on a particular cassette and by which only one binary switch would need to be changed to affect the print parameters.

Therefore, it would have been obvious to combine Bahrabadi with Furuya, Spain, and Zinsmeyer to obtain the invention as specified in claim 20.

9. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Furuya, Spain, and Mochinaga as applied to claim 31 above, and further in view of Bahrabadi.

Furuya, Spain, and Mochinaga do not disclose expressly wherein said code is a binary code.

Bahrabadi discloses wherein said code is a binary code.

Furuya, Spain, Mochinaga, & Bahrabadi are combinable because they are from the same field of endeavor, printing using specific configuration information provided in to be detected image.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the binary code of Bahrabadi with the system of Furuya, Spain, and Mochinaga.

The suggestion/motivation for doing so would have been to provide an increased number of possible configurations that can be stored on a particular cassette and by which only one binary switch would need to be changed to affect the print parameters.

Therefore, it would have been obvious to combine Bahrabadi with Furuya, Spain, and Mochinaga to obtain the invention as specified in claim 32.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art refer to the attached Notice of References Cited.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached at (571) 272-7402. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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